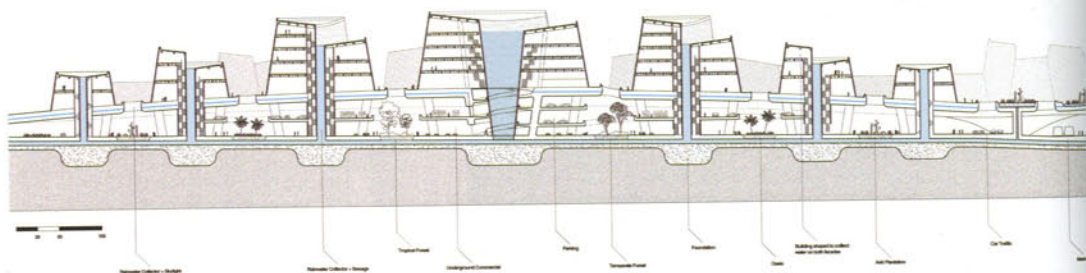
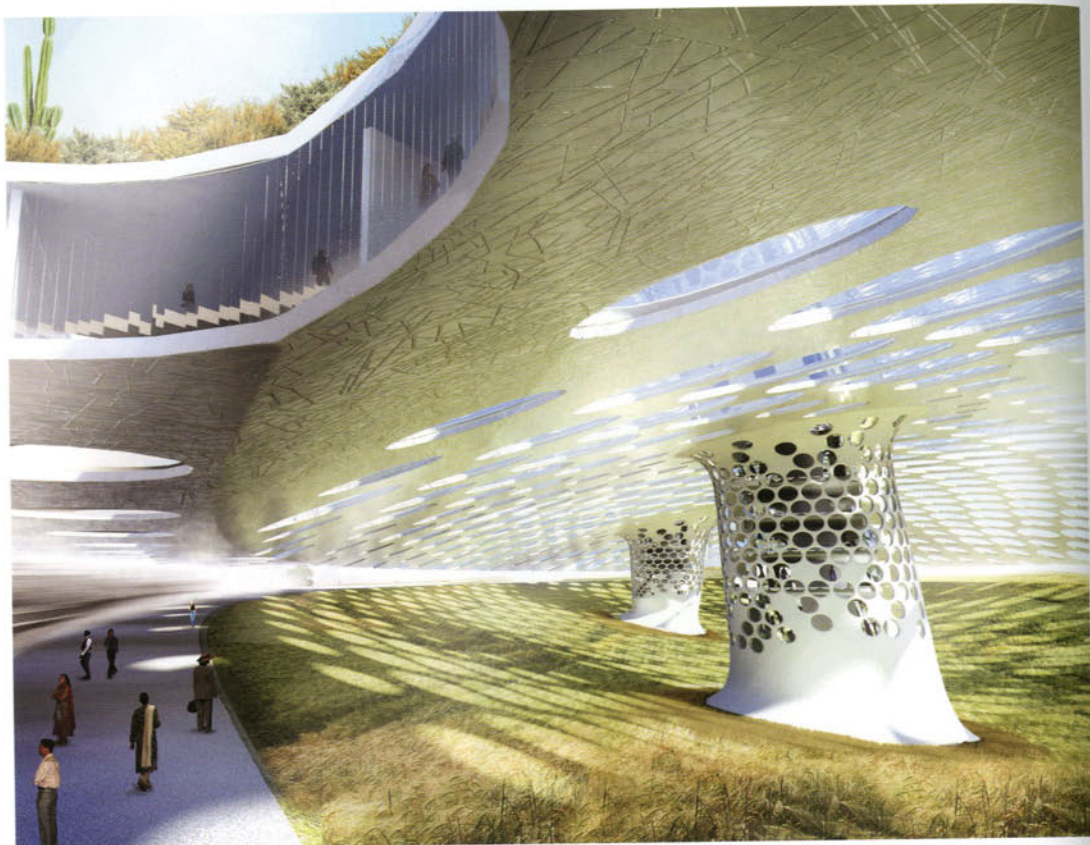
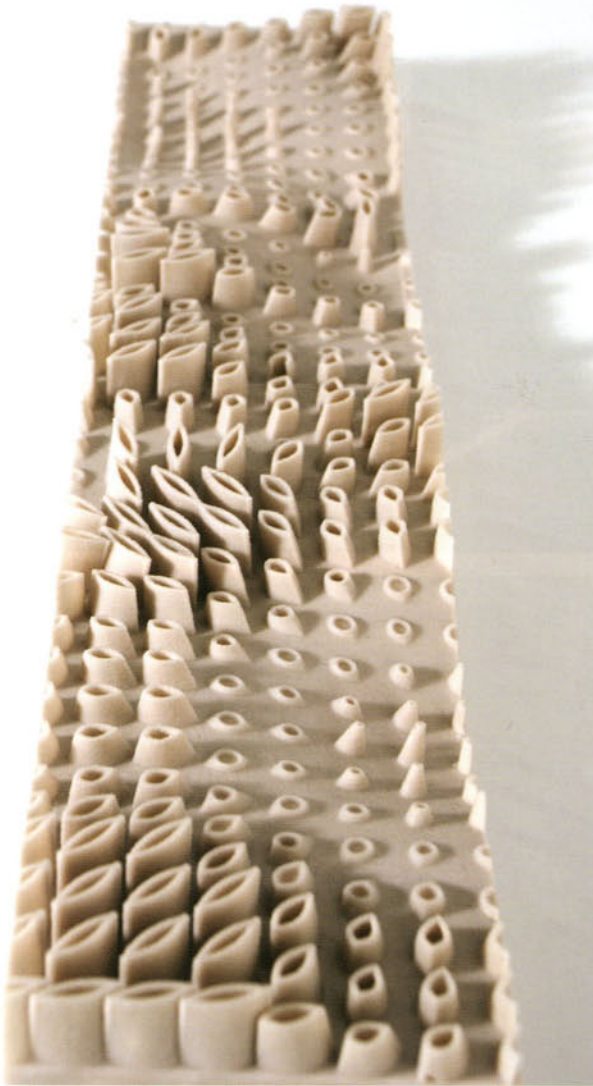


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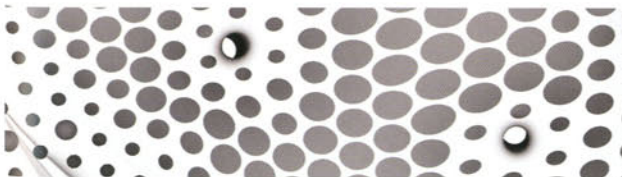
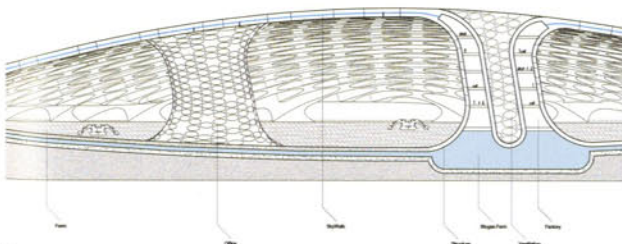


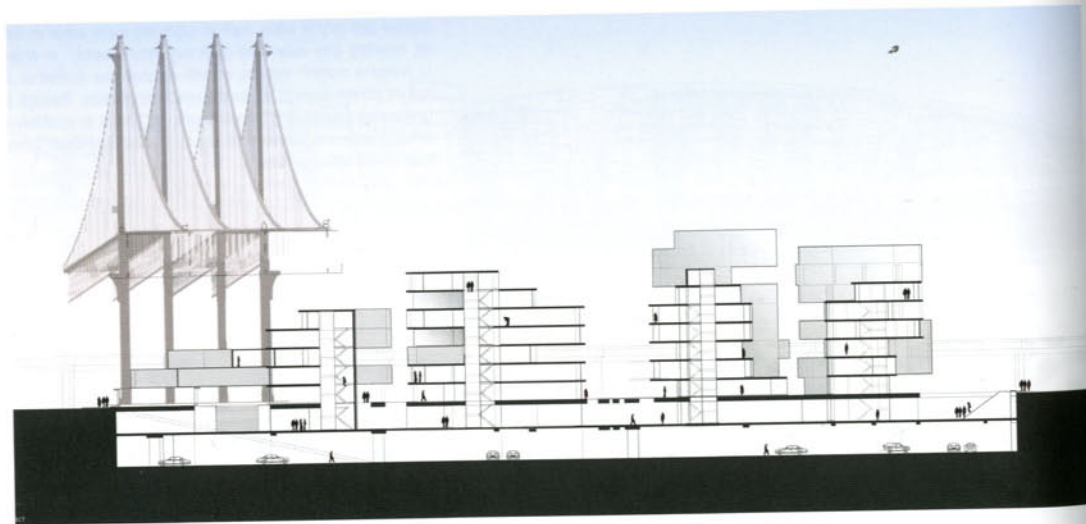
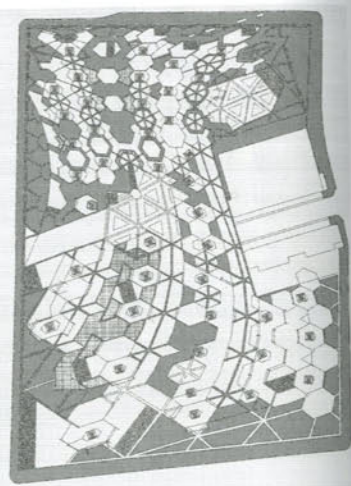
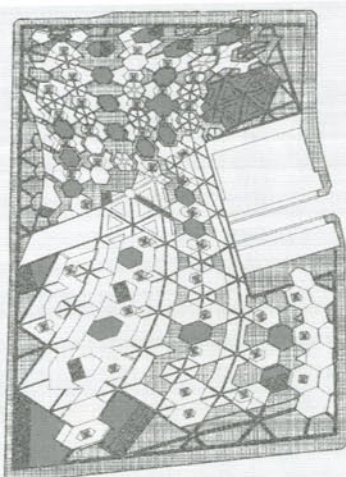
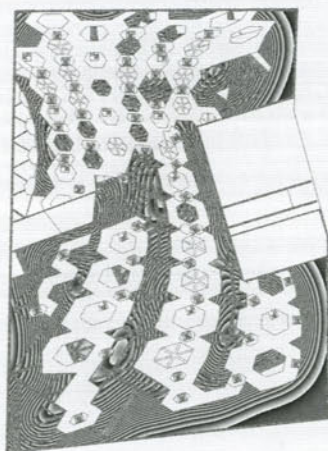


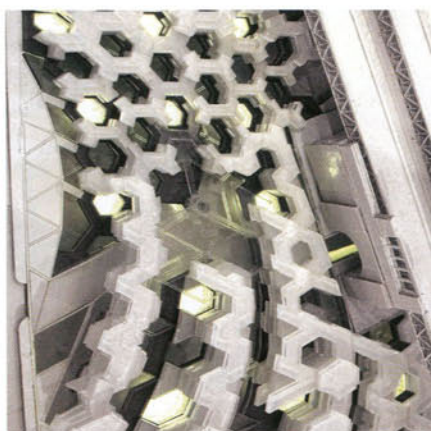
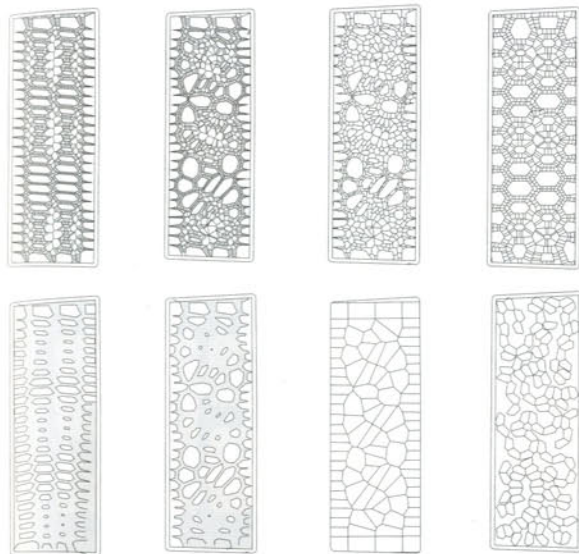
Aquatic City is about building a sustainable society through adaptation. In the history of scientific development, scientists have made many attempts to classify the differences between humanity and nature. This human-centric attitude has led architecture, in many cases, to establish a boundary condition that separates civilization from the wild. However, "present day research leads us farther and farther away from this opposition between human and the natural world." It is not only important for designers to recognize "this growing coherence of our knowledge between humanity and nature" (Prigogine), but also reflect this thinking by integrating various systems of resources into one sustainable design.

I propose to develop an aquatic city in Tabuk, Saudi Arabia, where water supply has been always a social and political issue of this arid region. Tabuk is a new urban city developed quickly, roughly 30 years ago, based on a new irrigation technique - the irrigation circles. At the current rate of irrigation, however, Saudi fossil water will soon disappear in another 30 years. I began to analyze this problem by breaking down the fabric of Tabuk into various elements. By comparing natural phenomenon to each of these elements, I identified the unique relationship between water and city.

Therefore, I propose a city that integrates architecture and agriculture. Instead of letting water disappear in time, we can capture and recycle water, such as capturing water vapor in the air, recycling grey water and collecting natural water. In order to comprise multiple systems, a turtle eggshell was studied as a natural phenomenon to inspire the new infrastructure. Through a new zoning solution and infrastructures, my goal is to establish a different urban mechanism, where water is a social mediator rather than a mere utilitarian supply.







The "Residential Tissue" emerges as a revision to the highly desirable quality of flexibility found in modern architecture. Historically, population growth of New York City has been characterized by continuous flows of immigration waves. These waves have played a major part in the organization of the city's urban fabric, and its housing characteristics.

As a response to the current and expected housing demand, and projected population growth for the next two decades, the architectural intention of this thesis project is to re-address the issue of adaptability and accommodation of growth within the urban tissue.

Different from some of the initiatives proposed by the city's development plan for the year 2030, the "Residential Tissue" intends to provide a framework, spatial and conceptual for different living arrangements. The concept of adaptability is addressed by establishing a possible combination and recombination of a series of spatial conditions, specific in program but generic in form.

The building, homogeneous in its layout, consists of a systematic organization of a self-similar geometry, which creates a larger flexible framework, where at times the unit could equal the size of a room, or the size of a building footprint. This order allows possibilities for growth, diminution and change of programmatic needs.

Extended over a large land area punctuated by courtyards, the building arrangements allow for a systematically modular system that connects spaces by clear networks of circulation, and weaves the site creating possible new open spaces and uses that may change over time, extending the life of the building.

